

Helping the Meat and Milk Supply

(Special Information Service, United States Department of Agriculture.)

SAVE MEAT WITH MILK.



This is the Source of the Nearest Approach to a Perfect Human Food.

MILK IS PERFECT FOR HUMAN FOOD

Department of Agriculture Urges More Liberal Use of Product to Save Meat.

IT EXCELS ALL OTHER FOODS

There Are Always Sick Children in All Localities Where Milk Is Scarce—Excellent for Body Building Protein.

Milk is the nearest approach to a perfect human food, and it is by far the best food for children. Children must have milk in order to develop properly, and all persons of whatever age need it in order to keep in proper condition.

The advice of the United States department of agriculture is: "Save on other things if you can, but not on milk, your child's best food."

Children who do not get milk, but are given tea and coffee instead, are for the most part sickly. There are always many sick children in cities and in countries where milk is scarce. When prices go up and mothers begin to economize on milk, more children become sick. That is one of the things that, under any and every condition, the government regards it as essential to guard against. Food must be saved to feed the army and money must be saved to finance the war, but the nation's children who in a little while will be the nation's men and women must be given their opportunity for health and strength. Incidentally, the liberal use of milk does save meat and other transportable foods.

Needed for Bones and Teeth.

Children, in larger measure than grown persons, require lime. It is needed, particularly, for their bones and teeth, and in smaller quantities for their blood and other parts of their bodies. Milk is the chief food for lime. A cup of milk contains approximately four times as much lime as an egg. It is the cheapest food for lime.

Milk is also an excellent food for body-building protein. In that respect it is like eggs and meat. Milk protein is especially good for children, but it is good for and should be used by everybody.

Milk, in addition, is an excellent fuel food. Children, who are much more active than adults, need more fuel to burn in their bodies to help them run and play and work. The fat and the milk sugar burn up as fuel. A quart of milk gives the same amount of fuel as a pound of lean meat. A quart of milk gives the same amount of fuel as eight eggs. Milk, even at advanced cost, is the cheapest fuel food. Take your pencil and make a little comparison in cents.

Skim Milk Also Good.

Whole milk, of course, is the best food. But skim milk is good food, too. It has the lime, the sugar and the protein of the whole milk. It is deficient in fat and has not much of the growth substances as has whole milk. Use whole milk—but do not throw away the skim milk.

Every child, big or little, should have plenty of milk. The big boys and girls need it only slightly less than do the babies, and grown persons need it only slightly less than the big boys and girls.

Be liberal with the milk ration. Do not think of milk merely as a refreshing drink. Think of it as a good, nourishing food—the best food. The children need other foods, of course—vegetables, fruits, cereals. But, most of all, they need milk.

Be sure that the milk is clean and fresh when it is delivered to you, and that you keep it cold and clean and covered until it is used.

To Extend Motor Service.

Because the motor truck route for eggs recently established between Vineland and Millville, N. J., and New York city—about 140 miles—has proven so successful, plans are made to add more trucks to carry vegetables

and fruit throughout the producing season. The truck company has agreed to supply as many trucks as are needed and is glad to get the business, because it fits in with the hauling of merchandise from New York city to Philadelphia, and insures the trucks going back loaded to New York.

DRINK LOTS OF MILK

Be liberal in the use of milk.

It is good food—the best food in the world, in fact—and for all the milk that is used a corresponding quantity of transportable food is saved for overseas. Give the children plenty of whole milk, and drink a fair quantity yourself. It is one of the best bone and body builders.

Do not throw away the skim milk. It contains the protein, sugar and lime of whole milk.

Get acquainted—unless you already are—with the charms of buttermilk. It is a refreshing cold drink—quite as refreshing as any you could buy at a fountain. And it is a fine food. Men can do hard manual labor on buttermilk alone. That has been demonstrated.

Save, certainly, but save the milk. Do not try to save on milk.

MARKETING BUTTER AND CHEESE BY PARCEL POST

Creameries, dairies and individual farms, in various instances which have been authenticated by the bureau of markets of the United States department of agriculture, have developed a successful system of parcel post marketing for butter and cheese. The conclusion reached by specialists of the department as a result of a number of experimental shipments is that well-made butter, thoroughly chilled before shipping, may be marketed successfully by parcel post when packed in a suitable container and where extremely high temperatures are not encountered. Shipments during extremely hot weather frequently are unsatisfactory.

The bureau of markets received 454 shipments of butter, coming distances of from 187 to 536 miles, during various months of the year. Of these shipments 440, or 96.9 per cent, were received in satisfactory condition. The bureau reshipped this butter to various state experiment stations and the shipments arrived in good condition where the temperature and distance were not too great. In general, shipments from Washington were successful when forwarded as far north as Maine and as far west as Michigan and Indiana. Shipments into the South were successful shorter distances.

Farmers' Bulletin 930, "Marketing Butter and Cheese by Parcel Post," issued by the United States department of agriculture, gives detailed advice on methods which have been found advantageous. The bulletin urges that every care and precaution be exercised in making the butter and preparing it for shipment. The shipping container should properly protect the butter, and packages should be posted as near to mail time as possible in order to obtain delivery in the quickest practicable time.

The postal regulations provide that when butter is so packed or wrapped as to prevent damage to other mail it will be accepted for delivery either at the office of mailing or on any rural route starting therefrom. Butter will also be accepted for mailing to all offices to which, in the ordinary course of mail, it can be sent without spoiling when suitably wrapped or inclosed or when packed in crates, boxes, or other suitable containers.

It is well to stamp or write on packages of butter: "BUTTER—Keep away from heating apparatus."

Isolate Affected Calf.

As soon as scours is discovered it is best to separate the affected calf from the others and carefully disinfect the pen.

Build Up a Valuable Herd.

A valuable herd can be gradually built up by raising female calves from the best cows.

CAPONIZE MALES FOR CHOICE FOOD

One Way of Answering Call for Greatly Increased Supply of Poultry and Meats.

HAS CONTENTED DISPOSITION

Breeds Best Adapted for Purpose Are Plymouth Rock, Brahma, Cochins, Cornish, Langshan and Wyandotte—Leghorn Too Small.

(Prepared by the United States Department of Agriculture.)

Caponizing the surplus cockerels is one way of answering the call made by the United States department of agriculture for a greatly increased production of poultry and meat. Capons, the name applied to unsexed male birds, are to the poultry dealer what fat steers are to the beef packer—the source of the choicest food product of their kind. Like the steer the capon has a contented disposition. It develops more uniformly than the cockerels, and, as it fattens more readily, is larger at the same age. This coupled with the fact that the flesh of capons retains the softness and tenderness of young birds and is, therefore, of superior quality, causes them to command a better price on the market.

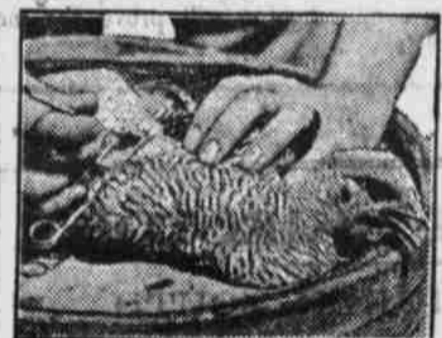
Since capons must be held and grown until winter they take up some room which might be used to better advantage for laying hens. In such cases it may be advisable to fatten the surplus cockerels and sell them as broilers. Another consideration is the local market, which must show the demand for capons.

Best Breeds to Caponize.

Large capons bring the best prices, and it seldom pays to caponize males of the small breeds, such as Leghorns. Breeds best adapted for this purpose are the Plymouth Rock, Brahma, Cochins, Cornish, Langshan, and Wyandotte.

Cockerels should be caponized as soon as they are large enough for the operation to be performed easily, usually when they weigh from 1½ to 2½ pounds, or when they are from two to four months old. Cockerels can be caponized when larger and older than this, but at such time there is more danger of loss of blood, and extreme care must be exercised to prevent the birds from bleeding to death. Caponizing is usually done in June, July and August.

Cockerels to be operated upon must be confined and given no feed or water for 24 to 36 hours. This serves to empty the intestines and enables the



Performing the Operation.

testicles to be located and removed more easily. The bird is laid upon its side on a box, head of a barrel or a table of convenient height, and held in a stretched-out position by means of cords passed about the wings and the legs and weighted with weights equivalent to that of half bricks. The operation must be performed out of doors in a sunlighted space, or else artificial light must be reflected into the body cavity in order to allow the operator to locate and remove the testicles.

Use Sharp Knife.

Make the incision with a sharp-pointed knife between last two ribs, but before making the incision pull the skin down toward the leg. Then when the operation is over and the bird is released, the skin slips over the wound and closes it. Insert the spreader and enlarge the cut sufficiently to allow the introduction of the testicle remover, but do not cut too far toward the backbone, or into the fleshy part of the body wall, as that will cause profuse bleeding. A thin membrane will be observed covering the intestines. This must be torn with the sharp-pointed hook. The intestines are then exposed and these are pushed aside, two small, white, yellow (sometimes dark colored) bodies will be observed, one on each side of the backbone, and close to it. These are the testicles. Remove these with the testicle remover, taking the lower one first. Persons not expert at caponizing find it impossible to locate the lower testicle. In this case, the upper can be removed, the bird turned over, and the other testicle removed through an incision on the other side. Care must be observed in removing the testicles not to prick or rupture the arteries which run close to them. Should this occur, the bird will bleed to death. Be sure that the entire testicle is removed. If a piece is left, the bird will act and look like a cockerel instead of a capon, and will sell for less than capon prices. Such a bird is known as a slip. It is advisable for a beginner to practice this operation upon a dead fowl. The place to make the incision, the location of the testicles, etc., can be definitely learned in this way and confidence gained in caponizing live birds.

HOME-GROWN PROTEIN FEEDS

Stockmen Should Plan to Produce an Adequate Supply of Leguminous Crops This Year.

(Prepared by the United States Department of Agriculture.)

Clovers, alfalfa, soy beans, cowpeas and vetches can be profitably produced on every live stock farm in the country and it is of great importance that an adequate supply be grown this year to furnish feed for live stock. These leguminous crops are comparatively rich in protein. The recent prices of feeds which are rich in protein have been so high as to prey vitally on the net profits which otherwise would have accrued to the producers of live stock.

Varieties of seed of the crops mentioned have been acclimated and rendered practical for production in nearly every section. The man who is unable to raise clovers, vetch or alfalfa on his farm, can resort to soy beans and cowpeas. The latter crops can be grown for either concentrates or roughage use and as such enable the stockman to prepare a well-balanced ration of home-grown feeds which contain a sufficient supply of protein. They enable him to reduce his feeding cost very materially and do away to a large extent, with high-priced cottonseed, lin-



A Good Field of Alfalfa in Kentucky.

seed and peanut meals, which range in protein content from 30 to 50 per cent and cost at the present time from \$60 to \$85 a ton.

The crop of soy beans and cowpeas can be utilized in a number of ways. They can be used for grazing or soiling purposes, be converted into hay or silage, or harvested and thrashed and used for feeding or seedling purposes. Every farm equipped with a gasoline engine and a small power grinding mill can readily convert any surplus cowpeas of soy beans into meal. It is essential that these grains be ground in combination with corn, usually one part of beans or peas to three or four parts of corn. When ground alone the excessive oil in the leguminous grains will cause the mill to gum up.

Solve the problem of high-priced feeds by growing crops rich in protein on your own farm.

CONSUMPTION OF CORN CROP

Urgent Reason for Increasing Production Is Absolute Need of More Grain for Food.

(Prepared by the United States Department of Agriculture.)

Approximately 85 per cent of the corn crop of the United States is consumed upon the farm. One and one-half to 2½ per cent is exported and the remainder is used in manufacture or otherwise consumed. During the last ten years the demand for corn has increased and at times the supply has been inadequate to meet it. This has led to the importation of corn from Argentina. While the amount imported has reached in some years a total of something more than 7,000,000 bushels, it is so small in comparison with the production in this country that corn imports are not an important factor in the corn trade.

However, this importation does call attention to the need of increasing the corn production in this country. But a much more urgent reason for increasing production is the absolute need of more food grains in the present world crisis. In 1917 the acreage planted to corn was the largest in the history of the country, nearly 120,000,000 acres, and exceeding the 1916 planting by about 15 per cent. The production is estimated at 3,150,404,000 bushels, the largest crop ever harvested. There seems to be every reason to believe that our own welfare and that of the allies in the world's war, as well as of neutral nations, will make desirable an even greater production of corn in 1918 on an acreage approximately equal to that planted in 1917.

NEED SELF-DEPENDENCE

(Prepared by the United States Department of Agriculture.)

We will not win this war unless states and communities rise to the emergency of solving local problems without dependence upon Washington. This is true state sovereignty and local self-government and is effective loyalty to the nation. —Assistant Secretary of Agriculture Clarence Onley.

Alfalfa as Honey Crop.

In some of the western states alfalfa is the principal honey crop, and like the clover it produces a clear honey of fine quality and flavor.

ATTACK ON TICK BEGUN IN SOUTH

Miles of Concrete Dipping Trenches Opposed to This Army of Parasites.

VATS IN ACTIVE OPERATION

Real Results Achieved Through Patriotic Action of Owners, Who Are Willingly Driving Cattle Through Disinfectants.

(Prepared by the United States Department of Agriculture.)

The first action in this year's effort to free 100,000 more square miles of Southern territory from cattle tick and costly fever tick began with the first warm days of spring when 1,250,000 cattle in 275 counties in the South began their fortnightly march to the dipping vats.

Twenty-three thousand dipping vats are actively in operation, and these vats if placed end to end would measure 100 miles of concrete trenches erected to oppose the costly army of the cattle tick. In charge of the vats are 285 inspectors of the United States department of agriculture, 280 state inspectors and 1,000 county inspectors, all working in co-operation.

Achieve Real Results.

The real results, however, are achieved through the patriotic determination of thousands upon thousands of cattle owners who willingly are driving their cattle through the dipping vats each fortnight. They have come to realize how great is the toll they have been made to pay to the tick and are particularly anxious to get rid of this meat-wasting parasite this year when meat is so important a war food.

With warm weather the tiny tick eggs laid last fall in the grass hatch out and the baby ticks get on the cattle to suck blood and to give them deadly tick fever. These ticks if left



Cattle Entering Dipping Vat.

alive long enough to mature and lay eggs multiply prodigiously. The dipping in the vat each fortnight catches these newly hatched ticks before they have got to the egg-laying stage.

No More Ticks.

After a few months of dipping there are no more live ticks to lay eggs and no more eggs left to hatch out in the grass. Cows and steers instead of turning a large part of the feed they eat into ticks, turn all of it into milk and meat.

By December 1 it is hoped that 125 additional counties of the South will be freed from this pest. At the rate tick eradication is now going, officials of the department believe that in 1921 the South will be practically free of cattle ticks and will have come into its own as a cattle-raising section.

PROPAGATE WEEDS BY SEEDS

Produced in Large Numbers Along Roadides, Fence Rows, Ditch Banks and Waste Places.

(Prepared by the United States Department of Agriculture.)

Many weeds are propagated only by seeds. Weed seeds are produced in large numbers along roadides, fence rows, and ditch banks, in vacant fields, and in waste places, and the seeds are scattered by wind, water, birds, and other agents. By cutting the weeds before the seeds are sufficiently mature to germinate, an enormous amount of trouble and labor and loss could be avoided; but only the most progressive farmers do this.

MAINTAIN FOOD SUPPLY

It will not be too much to ask able-bodied men with farm experience to aid the farmers in the necessary task of maintaining the food supply.—Secretary of Agriculture.

Can the Cockerels.

Can the cockerels when it no longer pays to feed them. Is the advice the United States department of agriculture is giving to the boys and girls of poultry clubs.

HAY MAKING COSTS REDUCED

System and Efficiency in This Important Operation Increase Quality and Quantity.

(Prepared by the United States Department of Agriculture.)

The hay crop causes more worry, anxiety, and disappointment than any other crop. It is the most widely grown crop on farms devoted to general agriculture; the time for harvesting is comparatively short and hay-making cannot be postponed without a consequent loss of quality and quantity. In many sections there are other crops that require attention about the time that the hay should be made, and often there is small grain to be cut, corn to be cultivated, and hay to be made, all at once. Labor is not only scarce but expensive. And there is



Annual Value of Hay Crop in United States Is Over One Billion Dollars.

the weather to be reckoned with, a factor that has a very important bearing upon quality and one over which the farmer has no control.

Hay has been quite steadily increasing in acreage for a number of years until at the present time it occupies about one-sixth of the tilled area or farms in the United States, and has an annual value on the farm, unbaled or over \$1,000,000,000. There are no statistics on the actual cost of producing the total annual crop, but it has been roughly estimated that it costs \$125,000,000 or more to harvest this enormous tonnage.

A reduction of even a small per cent in this cost would add millions to the profits of the hay growers of this country. Such a reduction can be brought about only by the use of modern haying machinery and of methods of making hay best suited to conditions.

REDUCTION OF FIRE LOSSES

Lightning Does Damage in United States to Extent of About \$8,000,000 Yearly.

(Prepared by the United States Department of Agriculture.)

Lightning, especially in rural districts, is a source of great danger and is responsible for the loss of valuable property. The annual fire loss due to lightning in the United States averages about \$8,000,000, and by far the greatest part of this loss is in rural districts. The only protection against it is the lightning rod. Many people hold the opinion that lightning rods do not protect a building at all, and that they actually increase the danger if they are not properly installed. But it is now definitely known that they afford some protection in almost every case, and if they are installed properly and intelligently they reduce the risk of loss from lightning to an almost negligible quantity. From such statistics as are available regarding damage from lightning in parts of the United States and Canada where thunder storms are frequent, it has been found that properly installed rods reduce the probability of a barn being destroyed by lightning by something like 90 per cent, and of a house by as much as 80 or 90 per cent.

Farmers' mutual fire insurance companies in some instances take cognizance of the protection afforded by lightning rods and make substantial reductions on the premiums charged on rodged buildings, while others only insure buildings which are rodged in a manner satisfactory to them. Such reductions will soon pay for the cost of installation of the proper rods. In view of the fact that lightning is one of the greatest causes of fires in the rural districts, all companies which insure farm property against fire should make a considerable reduction of premiums in favor of buildings which are protected by a satisfactory system of lightning rods, and the owners of such buildings should be careful to select a company which grants such reductions.

APPEARANCE OF NEW WEEDS

Report Should Be Made to Take Necessary Precautions to Prevent Their Dissemination.

(Prepared by the United States Department of Agriculture.)

If the first appearance in this country of weeds, such as Russian thistle, field hawk-weed, and Canada thistles, had been reported, much of the loss and trouble which they are causing might have been avoided. It is important to report the appearance of new weeds and to take precautions to prevent their dissemination.

Must Have Bone.

Just as bone in a horse is essential to power, so is bone in the chicken essential to good body development.

Common Calf Disease.

Diarrhea, or scours, probably is the most common disease of calves.